

Reply Comments on 07-176

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After reviewing all of the comments filed on the matter of AM stations using FM translators (AM-FX) I offer the following in reply.

The great bulk of the comments are in support of the use of AM-FX.

Allowing existing FX transmitters to broadcast AM stations is a simple matter of a couple of rules changes that would permit the AM station to deliver a high quality signal to the FX site. The larger concern is over what power levels should be allowed and what location limitations should be placed on an FX transmitter used for this purpose.

FX versus AM signal levels

I support those who state the limit of 2mv should be the standard. The reason for this position is not based purely on engineering but on practical application.

All comments seem to agree that FM spectrum is limited.

To that end we must devise a way to best allocate the use of FX units for operation by AM stations. If we use the limit of .5 mv as suggested by some or even 1 mv as suggested by others, we run the risk of allowing major AM stations to operate translators in areas that are secondary to their daytime signal while eliminating an allocation that could be used by a smaller AM station whose main area of service falls inside the .5 or 1 mv contour of the larger AM station but not inside the 2mv contour of that station. I agree that good AM listening *can* occur at levels below 2 mv but we must keep in mind that most areas will have several AM stations needing this AM-FX relief. Lower power AM stations at the upper end of the dial have less "area to locate" than lower dial position higher power stations due to the difference in contour size.

To illustrate, station "A" operates from "Big City". Station "B" operates from "Little City." The 1 mv contours of these stations overlap but the 2 mv contours do not. Using 1 mv as the limit would lead to a situation where each application might be mutually exclusive. This would of course result in problems since each station would want as much reach as possible. The situation would be even worse if Station "A" operates with much higher power than Station "B" and has resources to request several FX stations that would saturate the area within their 1mv or .5 mv contour. This would effectively lock out Station "B" or allow Station "A" to traffic some of its FX sites at an exorbitant profit.

If the limit for AM-FX is set at 2 mv to start with then Station "A" and Station "B" would

not be attempting to cover the same common area but would have to concentrate efforts on areas that are in fact closer to their respective tower sites or city of license and in this way minimize the chance for mutually exclusive applications. While I agree that many AM stations do serve listeners who receive less than 2 mv of signal during the day, we need to make sure that we do not “over serve” some AM stations at the expense of others. Many comments agree that there is a need to make sure that the relief sought by implementation of AM-FX actually gets to the stations most in need. To that end, we need to have the limitations close enough to the primary service area so that more stations can apply without being MX’d. Having both Station “A” and Station “B” on an FX inside each station’s 2 mv contour is better than each station trying to solve an MX problem because each wants to go to a limit of 1 mv or worse yet .5mv.

Power Levels

I also support those who have brought up the fact that the NAB proposal is silent on the power levels to be used. I think it would be a much more efficient use of spectrum to allow an FX station to use higher power at a single site rather than attempt to cover an area with multiple translators on multiple frequencies causing the possibility of even more MX situations. Larry Langford offered comments that show that using an AM station’s main tower that a good match for a typical kilowatt station can be made with an FX power of a few hundred watts into a single bay antenna mounted at the top of the AM tower. This should be explored and stations that opt to mount an FX antenna on the AM tower should be allowed that power that will provide a good match of the 2 mv AM contour compared to the 60 dbu of the FX station. This can also help remove possible MX situations. It should not be hard to devise a regulation that would allow the 60 dbu contour of the FX station to roughly replicate the 2 mv contour of the AM station even with the complication of the AM being directional. As long as the AM tower site is used as the point of operation the directional nulls could be ignored in the calculation. The limiting factor would be the 2 mv contour in the *major lobe* of the station.

In the case where for whatever reason the main lobe of the AM station is not in line with the city of license, the FX transmitter should be allowed whatever power is required to achieve a signal level of 60 dbu over the AM station city of license, without regard to the extent of overlap of the 2 mv contour in the AM pattern nulls.

LPFM FX service

Some have asked the FCC to allow LPFM stations to act as FX stations for AM stations needing to be on FX. I would support this move which is also supported by NAB comments for the following reasons and with certain limitations.

It is true that LPFM stations are non commercial in nature and are intended to stay that way. This tends to make them more community responsive since they are of little value to commercial broadcasters wanting to operate in that community. However many stations have expressed comments that indicate that they find it hard to stay on the air when they

do not have local live programming to offer. These stations have the option of going off air or filling with automated or satellite delivered programming. The use of automated or outside programming is a poor use of the allocation since it provides very little in LOCAL programming. In many cases the LOCAL AM station has the staff and the expertise to do great local programming but cannot be heard because of the power and time restrictions of the AM license. Why then should we not allow the LPFM station to work with the AM station to achieve the best of both worlds? If the LPFM station desires to allow some of it's time to be filled by the AM station then why not allow it? I would also support a regulation that would allow the AM station to use an LPFM only until an application window becomes available in which the AM station could apply for its own FX station. In this way immediate relief could be obtained with a better solution coming in the future.

While I can see the potential for abuse I can also see that if controlled, there will be great benefit to the public if LPFM is allowed to assist local AM. First of all the rules would have to be amended to allow the LPFM to translate the AM signal as delivered without any alteration to eliminate the commercial content. The reality is that if an AM station is allowed to broadcast a news or sports program over an LPFM station but the commercial content must be taken out before broadcast then why would a sponsor support the program. Obviously the public would rather tune to the LPFM to hear the program than deal with the noise or lack of signal on the primary AM station. This means that the AM station would provide the program and the sponsor would be assured that almost no one would hear his or her message if the LPFM must delete it. This would not last long I assure you.

The great majority of LPFM stations might not want to enter into an agreement with another local station , BUT THE *OPTION* SHOULD BE AVAILABLE with strict limitations. I would limit the permission to allow only AM stations that are licensed to the same community as the LPFM and or completely encompass the LPFM 60dbu contour within the AM station's 5 mv Day contour to provide programming for FX mode. In this way LPFM stations would not become out of market repeaters for commercial AM stations

LPFM FX service as I detail here would still protect diversity since the LPFM station still has the option on when it wants to initiate its own LOCAL programming. The income to the LPFM station would allow them to enhance their local staff and local service. The AM station could never be the primary user of the LPFM station. It would always be a secondary user based on the needs and desires of the LPFM licensee.

I think we need to give local broadcasters the latitude to decide how they can best work together to serve the public. And in the end, service to the public is what this is all about.

On the question of phase in I think this requires a bit of discussion. In order that the stations needing the help the most get it first I think there can be a form of phase in based on technical situations rather than station class . For instance lets say that a station is the only AM in a county and in fact no other AM station puts a signal into the station's coverage area of 2 mv or more and there are no pending applications for FX stations in that area. That AM station should be able immediately to apply for an FX if

the spectrum permits. Despite statements to the contrary, many areas exist that can tolerate more FX assignments right now.

This concludes my reply comments.